

Ordering and Receipt of Hazardous Materials including all CEMS Inventoried Substances

EHS-CEMS-SOP.01 rev.00 Effective Date: March 28, 2006

Revision Date:

1. Purpose and Applicability

- 1.1. This document provides the procedures required for the ordering and receipt of hazardous materials and other substances tracked through the CEMS (Chemical Environmental Management System) inventory database. Procedures for using a Procard or a Purchase Order will be described. Hazardous Materials should be handled by trained personnel and the majority of these materials will require bar coding. It is important that the inventoried materials be entered into the CEMS database correctly to include storage areas, hazards and the responsible owner, especially for safety and emergency response reasons. (This information also helps to maintain regulatory compliance to the US EPA's Emergency Planning and Community Right to Know Act, 40 CFR Part 355 and OSHA's Hazard Communication Regulations 29 CFR 1910.1200).
- 1.2. Various procedures will be used when ordering laboratory items, including variances in the "Ship To" address. See "2.8 CEMS Inventoried Substance List" for product examples.
 - 1.2.1. Most substances will need to be recorded into the CEMS inventory database, and thus, shipped to Laboratory Health and Safety Services. A trained staff member will receive and bar code the primary container, enter the material onto the CEMS database, and then deliver it to the appropriate storage location as noted on the packing slip. (See section 4.1)
 - 1.2.2. Chemical purchases made through the Lederle Vendor Stockroom will be bar coded at the time of purchase.
 - 1.2.3. Other hazardous materials may not require bar coding and should be shipped directly to the laboratory. (See section 4.2)
 - 1.2.4. Hazardous materials purchased directly from a store must be bar coded under the direction of the responsible owner.
 - 1.2.5. Radioactive materials have additional procedures and will be shipped to Environmental Health and Safety. (See Section 4.3)

2. Definitions

- 2.1. **Carrier** Transports materials from a vendor to the University (e.g. UPS, FedEx, DHL)
- 2.2. **CEMS** Web-based Inventory Database located at www.umass.cems.sr.unh.edu
- 2.3. Laboratory Any room operated by the University of Massachusetts that will store hazardous materials and/or non-hazardous CEMS inventoried substances. Examples include the traditional science laboratories as well as art studios, film developing rooms, theater set design rooms, etc.
- 2.4. Laboratory Health and Safety Services Bar codes primary containers, enters substance into CEMS, and delivers package to storage location. Located in Lederle Graduate Research Tower Room 125
- 2.5. Ordering Personnel The individual that places the order via Procard or Purchase Order
- 2.6. **Responsible Owner** The individual ultimately responsible for the hazardous material. This in most cases will be the Pl.

- 2.7. Storage Location The building and room number where the substance will be stored
- 2.8. **Vendor** The Company where the order is placed. In some cases the vendor will act as a distributor and will have a package shipped directly from the manufacturer.
- 2.9. CEMS Inventoried Substance List

Shipped to LGRT 125 and CEMS Inventoried

(bar-coded by LHSS)

Flammable/Combustible Liquids (e.g. alcohols, solvents, lubricants, paint thinner, aerosols, paint)

Flammable Solids (e.g. magnesium, sodium, organo metallics)

Oxidizers (e.g. concentrated mineral acids, bromates, chlorates, permanganates)

Organic Peroxides - (e.g.. hydrogen peroxide >8%, benzoyl peroxide)

Poisons – not included in the above categories (i.e. biological toxins, dyes, glazes, paints, adhesives, and specimen solutions)

Corrosives – (e.g. acids or bases which are corrosive to the skin and other materials having a pH less than 5.5 or greater than 11.0

Controlled substances – (e.g. Drug Enforcement Agency "DEA" listed)

Growth Media

Salts

Non-hazardous Buffers

Non-hazardous substances tracked for inventory purposes

Shipped to Responsible Owner and CEMS Inventoried

(bar-coded by owner)

Compressed Gases – including liquefied gases

Chemical Packages weighing greater than **50 pounds**

Hazardous Retail Items bought directly from a store – used as an integral part of the function of the laboratory (e.g. paint thinners, paints, ceramic glazes)

Shipped to Responsible Owner, NOT in CEMS

(not bar-coded)

Retail Products – used for routine household-like activities (e.g. cleansers, dish soap)

Materials expended within 1 to 2 days – working solutions

Molecular Biological Reagents and Enzyme preparations

Biological Materials to include biohazardous materials – (e.g. plant or animal tissue, reproducing biological organisms, bacteria, viruses, fungi, and yeast)

Radioactive Materials – ordered via Purchase Order and shipped to Draper Hall

Materials stored and shipped on **dry ice**

3. Roles and Responsibilities

- 3.1 Laboratory Health and Safety Services Receives the package, barcodes the primary containers, repacks in original box, and distributes the inventoried substances in a timely fashion (same day, or next business day if received after 3PM) to the appropriate location.
- 3.2 **Ordering Personnel** Must provide the vendor the appropriate information for the proper ordering, shipment, and final storage location. The Ordering Personnel will include in the Attention Line (Procard) or Comment Panel (Purchase Order) the Responsible Owner and storage location (building and room number).
- 3.3 **Responsible Owner** Responsible for the receipt of the hazardous material into the storage location. Signatures of Responsible Owners or authorized personnel will be required. Bar codes new containers not shipped through Laboratory Health and Safety Services.
- 3.4 Vendor Properly packages the hazardous materials and provides the carrier with the proper shipping address, in most cases LGRT125. The package must include an invoice or packing list, which will list the name and quantity of hazardous material, the responsible owner, storage location and the UMass delivery destination (if delivery will be made to a different location other than the storage location).

4. Procedures

- 4.1. Hazardous Materials Shipped to Laboratory Health and Safety Services, LGRT 125
 - 4.1.1. Order hazardous materials including all CEMS inventoried substances via normal Purchase Order or Procard procedures.
 - 4.1.2. Only CEMS inventoried substances shall be placed on this order. Other laboratory supplies must be placed on a different order and should be delivered directly to the using department via Distribution Services.
 - 4.1.3. Direct the vendor to ship the Substances to the following address:

University of Massachusetts Room 125 Lederle Graduate Research Tower 710 North Pleasant Street Amherst, MA 01003 ATTN: "See 4.1.4"

NOTE: On the PO header panel, change the "Ship To" default icon to "CHEMS". This will auto populate the above address.

4.1.4. Laboratory Health and Safety Services requires the following information to appear on the packing slip for delivery and bar coding purposes:

Name of **Responsible Owner**Storage Location (**Building** and **Room Number**)

4.1.4.1. **Procard** users shall ask that this information appear on the **ATTN** line of the shipping label. Abbreviate building names if there are space constraints.

Examples: Bill Smith LGRT 1003

Jane Doe Conte B162

J. McBiological Morrill IV N451

4.1.4.2. Purchase Orders/Blanket Purchase Orders

Change the "Ship To" address on the PO Defaults Panel (PO Header) to "CHEMS" (LGRT 125) BEFORE you enter your PO line(s).

List the <u>Responsible Owner and Storage Location</u> in the "**Comments**" Panel (Remember to click the <send to vendor> checkbox).

Use Account Code 739630 – Chemicals, except radioactive chemicals.

- 4.1.4.3. In some cases the responsible owner may wish the CEMS inventoried substance be delivered to a destination other than the final storage location. Please list this destination in the "comments panel" on a Purchase Order and where appropriate when placing an order through a Procard. In all cases the storage location must be listed.
- 4.1.5. Laboratory Health and Safety Services
 - 4.1.5.1. LHSS will receive, bar code and enter the substances into the CEMS database.
 - 4.1.5.2. They will repack the primary container into the original shipping package and place a distribution label on the outer package listing:

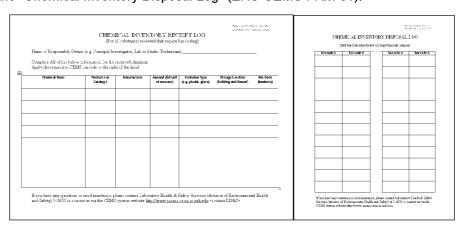
The Storage Location
The Names on the packing slip
The Date the package was received by LHSS
of Containers in the Package
Any Discrepancies or problems with the package
Any Failed Deliveries

- 4.1.5.3. LHSS will deliver the package to the storage location or a designated delivery location. LHSS will insure same day delivery if the package is received before 3PM. LHSS will make at least one morning and one afternoon delivery per day.
- 4.1.5.4. If no one is available to accept the shipment it will be returned to LGRT 125 and a delivery notice listing the date and time will be left on the door. Contact LHSS to arrange for pick-up or delivery.

4.2. Hazardous Materials Shipped Directly to the Departments

- 4.2.1. Order the hazardous material via normal Purchase Order or Procard procedures.
- 4.2.2. Other laboratory supplies may be placed on the same order.
- 4.2.3. The "Ship To" address will list the preferred destination of the responsible owner, however a person trained in the receipt of hazardous materials should accept the package.
- 4.2.4. The Responsible Owner or his/he designee is responsible for bar coding CEMS inventoried substances.
 - 4.2.4.1. Bar Code and write the substance onto the "Chemical Inventory Receipt Log" (EHS-CEMS-FRM-01), which will be picked up by Laboratory Health and Safety Services or enter the substance directly into the CEMS database <Add Inventory>.
 - 4.2.4.2. Chemicals that weigh over 50 pounds.
 - 4.2.4.3. Hazardous Chemicals bought directly from a store to be used as an integral part of the laboratory.

4.2.4.4. Hazardous substances that are integral to a process and remain in the same location may be bar coded just once at the storage location. Examples include fixed tanks, photographic fixers, ceramic clays, gas cylinders etc. If a different chemical is substituted or there is a significant change in the properties of the chemical a new bar code must be used and the old bar code shall be placed onto the "Chemical Inventory Disposal Log" (EHS-CEMS-FRM-01).



4.3. Radioactive Materials

- 4.3.1. All researchers ordering Radioactive Isotopes must have a <u>permit</u> issued by the "Radiation Use Committee" (RUC) which authorizes the researcher to use specific quantities of isotopes. If you are a new user, contact Environmental Health and Safety (EH&S) via phone 545-2682 or website www.ehs.umass.edu.
- 4.3.2. The Researcher must have a radioisotope protocol for the requested RAM before placing the order.
- 4.3.3. Obtain a Purchase Order Number.
 - 4.3.3.1. Radioactive materials shall not be purchased with a Procard. Only line-item specific Purchase Order Requests or a Blanket Order may be issued.
 - 4.3.3.2. Use Account Code 739650 Radioactive Materials.
 - 4.3.3.3. Each shipment of radioactive materials shall be delivered directly to the following address:

University of Massachusetts Department of Environmental Health and Safety Room 117 Draper Hall 40 Campus Center Way Amherst, MA 01003

- 4.3.3.4. EH&S will deliver the shipment to the respective ordering department.
- 4.3.4. Researcher calls Radioactive Material supplier to place the order.
- 4.3.5. Notify EH&S via the following "WEB" page form: http://ehs.umass.edu/ehsForms/Results/ramOrderNotification_SubmissionForm.asp which can also be found on the EHS website www.ehs.umass.edu.

5. Key References

- 5.1. "ORDERING BAR CODED SUBSTANCES Summary Sheet" EHS-CEMS-SOP.02
- 5.2. "CHEMICAL INVENTORY RECEIPT LOG" EHS-CEMS-FRM-01
- 5.3. "CHEMICAL INVENTORY DISPOSAL LOG" EHS-CEMS-FRM-01